

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A loader apparatus for use with a paintball marker ~~having a paintball inlet~~, the loader apparatus comprising:

a cartridge, ~~and a motive means,~~

said cartridge including a chamber for paintballs, said chamber having a paintball outlet, said cartridge further including a flow assistor, said flow assistor having a generally funnel-shaped surface, wherein said flow assistor is rotatable, wherein said surface includes irregularities for inhibiting jams in a flow of paintballs towards said paintball outlet during rotation of said flow assistor. ~~said loader apparatus further including a quick replacement connector for removably connecting said cartridge with respect to said paintball marker for communication of paintballs from said paintball outlet of said chamber to said paintball inlet,~~

~~wherein, said motive means is operatively connectable to said flow assistor for driving said flow assistor.~~

2. (Previously presented) A loader apparatus as claimed in claim 1, further comprising a base, and said cartridge is removably connectable to said base.

3. (Original) A loader apparatus as claimed in claim 1, wherein said loader apparatus further comprises a pressurizing member for maintaining a force on said paintballs in said chamber to urge said paintballs towards said paintball outlet.

4. (Previously presented) A loader apparatus as claimed in claim 3, wherein said pressurizing member comprises a spring, said spring being operatively connected to

said paintballs, so that said spring is adapted to act on said paintballs to urge said paintballs towards said paintball outlet.

5. (Cancelled)

6. (Cancelled)

7. (Original) A loader apparatus as claimed in claim 2, wherein said base further comprises a first mating surface, and said cartridge further comprises a second mating surface, which contacts said first mating surface when said cartridge is mounted on said base, and said apparatus further comprises a connector for releasably holding said first and second mating surfaces together.

8. (Original) A loader apparatus as claimed in claim 7, wherein said connector comprises a magnet, and a material that is magnetically attracted to said magnet.

9. (Currently amended) A loader apparatus as claimed in ~~claim 3~~ claim 1, wherein said loader apparatus further comprises a motor, wherein the flow assistor is rotatable by said motor, and wherein said loader apparatus further comprising comprises a delivery conduit, wherein said delivery conduit is positioned for communication of paintballs from said paintball outlet of said chamber to said a paintball inlet of said paintball marker, wherein said delivery conduit comprises at least one paintball sensor for detecting the presence of paintballs in said delivery conduit, said at least one sensor is operatively connected to said motive means motor so that said sensor sends a signal to activate said motive means motor when said sensor does not detect the presence of a paintball.

10. (Currently amended) A loader apparatus as claimed in claim 9, further comprising retractable stops positioned in said paintball outlet, wherein ~~said stops being adapted to retract~~ are retractable from said paintball outlet to allow the passage of paintballs ~~when by attachment of~~ when said cartridge is attached to said base, and said stops ~~being adapted~~ are biased to extend into said outlet to prevent the passage of paintballs when said cartridge is unattached from said base.

11. (Currently amended) A loader apparatus as claimed in claim 2, further comprising a motor, wherein the flow assistor is rotatable by said motor, and wherein said motive means ~~motor~~ is positioned in said base.

12. (Currently amended) A loader apparatus as claimed in claim 2, wherein the loader apparatus further comprises a motor, wherein the flow assistor is rotatable by said motor, and wherein the loader apparatus further comprising comprises a first driven means positioned in said base, wherein said ~~motive means~~ motor is operatively connected to said first driven means, and further comprising a second driven means operatively connected to said flow assistor, wherein said first driven means is operatively connected to said second driven means when said cartridge is mounted to said base.

13-20 (Cancelled)

21. (Previously presented) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

a) a cartridge including a chamber for paintballs, said chamber having a paintball outlet;

b) a base for connecting said cartridge to said paintball inlet for enabling passage of paintballs from said chamber to said paintball inlet;

c) a driven flow assistor for inhibiting jams in a flow of paintballs towards said paintball inlet; and

d) a motive means for driving said flow assistor, wherein said motive means is operatively connectable to said flow assistor, wherein said motive means is mounted to one of said base and said marker, so that said motive means is separate from said cartridge.

22. (Previously presented) A loader apparatus as claimed in claim 21, wherein said flow assistor is positioned at least partially in said chamber.

23. (Previously presented) A loader apparatus as claimed in claim 21, wherein said loader apparatus further comprises a pressurizing member for maintaining a force on said paintballs in said chamber to urge said paintballs towards said paintball outlet.

24. (Previously presented) A loader apparatus as claimed in claim 23, wherein said pressurizing member comprises a spring, said spring being operatively connected to said paintballs, so that said spring is adapted to act on said paintballs to force said paintballs towards said paintball outlet.

25. (Previously presented) A loader apparatus as claimed in claim 21, wherein said flow assistor comprises a generally funnel-shaped surface surrounding said paintball outlet, said generally funnel-shaped surface comprising surface irregularities for agitating paintballs.

26. (Previously presented) A loader apparatus as claimed in claim 21, wherein said base has a first mating surface, and said cartridge has a second mating surface, which contacts said first mating surface when said cartridge is mounted on said base, and said loader apparatus further comprises a connector for releasably holding said first and second mating surfaces together.

27. (Previously presented) A loader apparatus as claimed in claim 26, wherein said connector comprises a magnet, and a material that is magnetically attracted to said magnet.

28. (Previously presented) A loader apparatus as claimed in claim 27, wherein said delivery conduit comprises at least one paintball sensor for detecting the presence of paintballs in said flow conduit, said at least one sensor is operatively connected to said motive means so that said sensor activates said motive means when said sensor does not detect the presence of a paintball.

29. (Previously presented) A loader apparatus as claimed in claim 28, wherein said paintball outlet comprises retractable stops positioned in said paintball outlet, said stops being adapted to retract from said paintball outlet to allow the passage of paintballs

when said cartridge is attached to said base, and said stops being adapted to extend into said outlet to prevent the passage of paintballs when said cartridge is unattached from said base.

30. (Previously presented) A loader apparatus as claimed in claim 21, wherein said motive means is positioned in said base.

31. (Previously presented) A loader apparatus as claimed in claim 21, wherein said motive means includes an electric motor positioned in said base.

32. (Previously presented) A loader apparatus as claimed in claim 21, wherein said base is integrally connected to said paintball marker.

33. (Previously presented) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

a cartridge, and a motive means,

said cartridge including a chamber for paintballs, said chamber having a paintball outlet, said cartridge further including a flow assistor, wherein said cartridge is removably connectable with respect to said paintball marker for communication of paintballs from said paintball outlet of said chamber to said paintball inlet, wherein, when said cartridge is connected with respect to said paintball marker, said motive means is operatively connectable to said flow assistor for driving said flow assistor,

and wherein said loader apparatus further comprises a pressurizing member for maintaining a force on said paintballs in said chamber to urge said paintballs towards said paintball outlet.

34. (Previously presented) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

a cartridge, and a motive means,

said cartridge including a chamber for paintballs, said chamber having a paintball outlet, said cartridge further including a flow assistor, wherein said cartridge is removably connectable with respect to said paintball marker for communication of paintballs from said paintball outlet of said chamber to said paintball inlet, wherein,

when said cartridge is connected with respect to said paintball marker, said motive means is operatively connectable to said flow assistor for driving said flow assistor,

and wherein said flow assistor comprises a generally funnel-shaped surface surrounding said paintball outlet, said generally funnel-shaped surface comprising surface irregularities for agitating paintballs.

35. (Previously presented) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

a cartridge,

wherein said cartridge includes a chamber for paintballs, said chamber defining a paintball outlet, wherein said cartridge is positionable for communication of paintballs from said paintball outlet of said chamber to said paintball inlet of said paintball marker, and a pressurizing member for maintaining a force on said paintballs in said chamber to urge said paintballs in said chamber towards said paintball outlet, wherein said pressurizing member is adapted to contact a plurality of paintballs simultaneously,

wherein said loader further comprises a base, wherein said cartridge is removably attachable to said base,

and wherein said cartridge includes a flow assistor and said loader apparatus further includes a motive means operatively connectable to said flow assistor when said cartridge is attached to said base.

36. (Previously presented) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

a cartridge,

wherein said cartridge includes a chamber for paintballs, said chamber defining a paintball outlet, wherein said cartridge is positionable for communication of paintballs from said paintball outlet of said chamber to said paintball inlet of said paintball marker, and a pressurizing member for maintaining a force on said paintballs in said chamber to urge said paintballs in said chamber towards said paintball outlet,

wherein said pressurizing member is adapted to contact a plurality of paintballs simultaneously,

wherein said pressurizing member comprises a spring, wherein said spring is operatively connected to said paintballs, so that said spring is adapted to act on said paintballs to urge said paintballs towards said paintball outlet.

37. (New) A loader apparatus as claimed in claim 1, wherein said surface comprises a plurality of bosses.

38. (New) A loader apparatus as claimed in claim 1, wherein said surface comprises a plurality of dimples.

39. (New) A loader apparatus as claimed in claim 1, wherein said surface comprises a plurality of bosses and dimples.

40. (New) A loader apparatus for use with a paintball marker, the loader apparatus comprising:

a cartridge,

said cartridge including a chamber for paintballs, said chamber having a paintball outlet, said cartridge further including a flow assistor, said flow assistor having a paintball contact surface, wherein said flow assistor is rotatable, wherein said surface has a large diameter end and a small diameter end, wherein said small diameter end is downstream from said large diameter end, wherein said surface generally tapers from said large diameter end to said small diameter end, and wherein said surface includes irregularities for inhibiting jams in a flow of paintballs towards said paintball outlet during rotation of said flow assistor.

41. (New) A loader apparatus as claimed in claim 40, further comprising a base, and said cartridge is removably connectable to said base.

42. (New) A loader apparatus as claimed in claim 40, wherein said surface comprises a plurality of bosses.

43. (New) A loader apparatus as claimed in claim 40, wherein said surface comprises a plurality of dimples.

44. (New) A loader apparatus as claimed in claim 40, wherein said surface comprises a plurality of bosses and dimples.

45. (New) A loader apparatus for use with a paintball marker having a paintball inlet, the loader apparatus comprising:

- a) a cartridge including a chamber for paintballs, said chamber having a paintball outlet;
- b) a base for connecting said cartridge to said paintball inlet for enabling passage of paintballs from said chamber to said paintball inlet;
- c) a driven flow assistor for inhibiting jams in a flow of paintballs towards said paintball inlet; and
- d) a motor, wherein said motor is positioned in said base, wherein said motor is operatively connectable to said flow assistor.